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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/635,920

08/07/2003

Andrew Brookfield Swaine

550-460

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7590

03/16/2006

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EXAMINER

PUENTE, EMERSON C

ART UNIT

PAPER NUMBER

2113

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/635,920	SWAINE ET AL.	
	Examiner	Art Unit	
	Emerson C. Puente	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8,11-17,23 and 26-30 is/are rejected.
- 7) ☒ Claim(s) 3-7,9,10,18-22,24 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-30 have been examined.

This action is made **Non-Final**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 8, 11-13, 16, 17, 23, and 26-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,021,261 of Barrett, Jr et al. referred hereinafter "Barrett" in view of US Patent No. 6,031,847 of Collins et al. referred hereinafter "Collins".

In regards to claim 1 and 16, Barrett discloses:

at least one trace data source operable to generate an individual trace data stream including trace data signals and trace source identifying signals (see column 7 lines 25-29); and a trace bus coupled to said at least one trace data source (see figure 2 item 52, 56 or 60).

However, Barrett fails to explicitly disclose wherein the trace bus including trace data signal lines operable to carry trace data signals and trace source identifying signal lines operable to carry trace source identifying signals.

Collins discloses parallel transmission which communicates data between computer systems and terminals over several channels or lines (see column 1 lines 40-52).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Barrett and Collins such that data is communicated via parallel transmissions, indicating trace data signal lines operable to carry trace data signals and trace source identifying signal lines operable to carry trace source identifying signals. A person of ordinary skill in the art would have been motivated to combine the teachings because Barrett is concerned with transmitting data from a tracer to a trace parser (see figure 2 and column 7 lines 66 to column 8 line 3) and parallel transmission, as per teachings of Collins, provides a known and fast means to transmit the data from a tracer to a trace parser (see column 1 lines 40-52).

In regards to claim 2 and 17, Barrett discloses:

wherein said trace data bus includes one or more data size indicating signal lines operable to carry one or more size indicating signals indicative of how many of said trace data signal lines are carrying trace data signals (see column 7 line 50).

In regards to claim 8 and 23, Barrett discloses:

comprising a trace data filter operable to perform trace data filtering in dependence upon said trace source identifying signals (see column 8 lines 9-12).

In regards to claim 11 and 26, Barrett discloses:

wherein said trace source comprises a software triggered trace data generator operable such that a software controlled write to one or more predetermined memory location triggers generation of a trace data stream by said software triggered trace data generator (see column 6 lines 29-32).

In regards to claim 12 and 27, Barrett discloses:

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wherein said trace data source includes one of: a processor core; a digital signal processor; and a memory bus monitor (see column 6 lines 33-34).

In regards to claim 13 and 28, Barrett discloses:

wherein said apparatus comprises an integrated circuit (see column 3 lines 47-49).

Claims 14, 15, 29, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Barrett in view of Collins and in further view of US Patent No. 6,687,860 of Iijima et al. referred hereinafter "Iijima".

In regards to claim 14 and 29, Barrett in view of Collins fails to explicitly disclose:

wherein said trace bus includes a trace data valid signal line operable to carry a valid signal generated by said trace data source and indicative of said trace data source being active to generate said trace data signals.

However, Iijima discloses a trace data valid signal line operable to carry a valid signal generated by said trace data source and indicative of said trace data source being active to generate said trace data signals (see column 13 lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Barrett and Collins with Iijima to include a trace data valid signal line operable to carry a valid signal generated by said trace data source and indicative of said trace data source being active to generate said trace data signals. A person of ordinary skill in the art would have been motivated to combine the teachings because Barrett is concerned with transmission of data (see figure 2 and column 7 lines 66 to column 8 line 3), and providing a data

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valid signal, as per teachings of Iijima (see column 13 lines 1-5), would provide a more reliable transmission of data.

In regards to claim 15 and 30, Barrett in view of Collins fails to explicitly disclose:

wherein said trace bus includes a trace data receiver ready signal line operable to carry a ready signal generated by a trace data receiver coupled to said data bus and indicative of said trace data receiver being active to receive said trace data signals.

However, Iijima discloses a ready signal line operable to carry a ready signal generated by a trace data receiver coupled to said data bus and indicative of said trace data receiver being active to receive said trace data signals (see column 13 lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Barrett and Collins with Iijima to include a ready signal line operable to carry a ready signal generated by a trace data receiver coupled to said data bus and indicative of said trace data receiver being active to receive said trace data signals. A person of ordinary skill in the art would have been motivated to combine the teachings because Barrett is concerned with transmission of data (see figure 2 and column 7 lines 66 to column 8 line 3), and providing a data valid signal, as per teachings of Iijima (see column 13 lines 1-5), would provide a more reliable transmission of data.

Allowable Subject Matter

Claims 3-7, 9,10, 18-22, 24, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

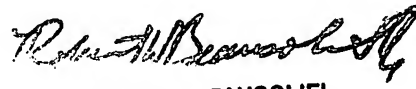
See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (571) 272-3652. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ecp


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